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*Width is Not Additive.*

We examine the behavior of Gabai's notion of width of a knot under the operation of connected sum. We develop the construction suggested by Scharlemann and Thompson to obtain an infinite family of pairs of knots  $K_\alpha$  and  $K'_\alpha$  so that  $w(K_\alpha \# K'_\alpha) = \max\{w(K_\alpha), w(K'_\alpha)\}$ . This is the first known example of a pair of knots such that  $w(K \# K') < w(K) + w(K') - 2$ . (Received January 24, 2011)